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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,465	05/30/2001	Jesse Donaldson	PALM-3639	1512

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EXAMINER

PENDLETON, BRIAN T

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/871,465

Applicant(s)

DONALDSON ET AL.

Examiner

Brian T. Pendleton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15,24 and 28-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15,24 and 28-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

Claims 1, 2, 4, 6, 9-11, 14, 15, 24, 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanamori et al in view of Tran et al, US Patent 6,359,987. Kanamori et al teach a portable telephone set (which is handheld) comprising first audio signal 101 coupled to first variable attenuator/amplifier 203, second audio signal 110 coupled to second variable attenuator/amplifier 205, control unit 111 and mixer 206 for outputting an audio signal. The first audio signal 101 is a talking voice signal while second audio signal 110 is a music information storage part (see column 5 lines 15-16). The main control unit 111 instructs the first and second variable attenuators/amplifiers 203, 205 to adjust their volumes via the gain control part 201. See column 5 lines 27-42. The main control unit 111 acts as a priority logic unit for assigning priority levels to the audio sources since it determines the volumes of the voice signal from source 101 and the music signal from source 110 based on whether the phone is in music replay mode, communication mode, or when a call is received over the radio communication network during music replay. Specifically, column 6 lines 12-15 indicate that during telephone communication, the music is muted using gain control part 201, while column 6 lines 43-47 indicate that during music replay, voice signals are muted using gain control part 201. When a call is received during music replay, the gain control part 201 adjusts the volume of the music and outputs a ring tone through the first variable attenuator/amplifier 203. See column 7 lines 11-53. Therefore the main control unit 111 has programmed rules for determining the volume of first and second audio sources and demonstrates a priority system based on the presence of the first and second audio sources. While Kanamori discloses priority levels as a function of the

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source of the first and second audio signals, the reference does not teach assigning priority levels as a function of a nature of the output device. Tran et al disclose a multimedia speaker detection circuit comprising speaker detector 64 which is able to distinguish between actively driven and passively driven speakers attached to computer system 12. As shown in figure 4, the level of amplification of the outgoing audio is based on the detected impedance level of the attached speakers. Therefore, it was recognized in the art to assign priority levels in an audio system according to the nature of the output device (type of speaker). Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to add a priority level based on the type of audio output device, as taught by Tran et al, in the invention of Kanamori for the purpose of maximizing the audio output without overdriving the speakers. Claims 1 and 31 are met. As to claim 2, the first audio source is a ring tone which is a signal event and the second audio source is music which is continuous. As to claim 4, the apparatus provides for an adjustment of the music signal and voice signal once the user starts talking after answering the telephone responding to a ring tone. See column 7 line 54 - column 8 line 18. Therefore a priority is established for two continuous audio sources. Per claim 6, main control part 111 is coupled to A/D converter 104, representing the priority logic unit. As to claim 9, the first audio source is a wireless communication signal. Per claims 10 and 11, music information storage part 110 is a digital storage medium and can be the first audio source and the talking voice be the second audio source. As to claim 14, the apparatus performs the claimed method. The main control unit 111 establishes a priority for the first and second audio sources based on their presence and output signals (which is based on the mode of the phone, the output signals being a ring tone or music or voice). The ring tone has a higher priority than the music signal since the music signal

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is lowered in volume or the ring tone is increased in volume so that the ring tone can be recognized by the user. Therefore one of the audio sources is adjusted in level and the sources are combined in mixer 206. Regarding claim 15, inherently there is a predetermined level in which one of the audio sources is adjusted in volume. Thus, the new volume level establishes a predetermined ratio between the two audio sources. Per claim 24, the main control unit 111 controls operation of the telephone device and inherently executes computer instructions which establish the priority between the audio sources as a function of the audio sources and a plurality of outputs and adjust the volume level of the signals. Regarding claims 29 and 32, column 2 lines 23-30 disclose that when the music replayed is the first audio source and the ring tone is the second audio source, the music replayed is decreased in volume. As to claim 28, when a call is answered and there exists a voice signal as the first audio source and the music replayed as the second audio source, the voice signal is amplified. See column 7 lines 47-53. Per claims 30 and 33, the combination of Kanamori et al and Tran et al does not disclose instructions for adjusting the first one of a plurality of audio signals by delaying in time the first one of the plurality of audio signals. Official Notice is taken that the concept and advantages of delaying a lower priority signal while outputting a higher priority signal were well known. It would have been obvious to one of ordinary skill in the art at the time of invention to delay, for example, the voice mail indicating signal while voice sounds were being transmitted for the purpose of not distracting from an ongoing conversation. The use of this technique eliminated the scenario that talkers are interrupted with an alert that cannot be conveniently addressed in the span of a conversation.

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Claims 3, 5, 7, 8, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanamori et al in view of Tran et al further in view of Kim. The combination of Kanamori and Tran et al does not teach that the device has more than two audio sources. However, that feature was well known in the art as evidenced by Kim. Kim discloses a mobile entertainment and communication device having more than two audio sources (alarm 123, computer jack 124 for connection to media players, memory card 200). It would have been obvious to one of ordinary skill in the art at the time of invention to include additional audio sources in the invention of Kanamori et al since it was already practiced in the art and provided an user with greater capabilities in the telephone. Regarding claim 5, the alarm 123 and tone ring are two signal event audio sources. Per claim 7, Examiner takes Official Notice that cellular phones at the time of invention comprised memory buffers, said buffers used to store a signal event such as a message received signal which is replayed at a later time. As to claim 8, it was obvious to reproduce stereophonic music with the advantage of better sound localization and "feel" of the audio. Per claims 12 and 13, Kanamori et al do not teach a flash memory for the music storage or that the memory is removable. Kim discloses memory card 200 which is removable and a flash memory unit (see column 2 lines 20-22).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (703) 305-9509. The examiner can normally be reached on M-F 7-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Sinh can be reached on (703) 305-4040. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian T. Pendleton
Examiner
Art Unit 2644

